BLAST meeting notes 12 January 2005

Box, Brown, DiMarco, Fischler, Gelfand, Glass, Harding, Johnson, Lamm, Lebedev, Michelotti, Ostiguy, Tartaglia, Walbridge

Mike Lamm summarized the magnet measurement systems currently in use at MTF and the associated data storage, along with the historical systems of interest. His transparencies are available as PPT or PDF.

Discussion ensued on what data would be useful to transfer to BLAST under Sybase. Lebedev will present a review of the most interesting data from the accelerator point of view at the next general meeting.

Data does not need to appear automatically and instantaneously in BLAST when it is added or updated in the home database, but process for moving data must be well documented and institutionalized so that it does not depend on an individual. At the very least there must be an orderly succession of responsibility.

The "best" values are not necessarily the measured values. The Tevatron dipoles, whose skew quadrupole has changed with the creep of the supports and again with the reshimming, are an example, as are the Recycler gradient magnets, whose end shims were replaced in the tunnel. It was agreed that the measured values should be in the database. It was not clear what the most effective is to make the "best" values available to the casual user who doesn't want to think about the details. The choices were to store the "best" values with an appropriate flag for retrieval or to calculate them on the fly when requested.

An additional issue is how to present data where there is great detail on a few sample magnets rather than more limited data on every magnet.

Discussion moved to the choice of data to move to BLAST after the Tevatron data. The Main Injector data is most ready to move, in that it is in a well-structured format and has been massaged extensively. It is, however, probably the least interesting from the accelerator physics point of view, being a smoothly running machine. Some votes were cast in favor of the Recycler, as that data is also well-structured and readily accessible, though not quite as extensively massaged, and much attention will be focused on the Recycler performance in the next year. The most important machine to model at the moment may be the Debuncher, but this data is the least ready for transfer to BLAST. The overlap of physicists involved in the various efforts is small enough that it is probably possible to pursue more than one machine simultaneously.

There will be a smaller meeting Wednesday, 19 January 2005, specifically on the Debuncher part of the project. 11:00 AM, Hermitage. P-Bar people will be invited.

The next general meeting will be Wednesday, 26 January 2005, 11:00 AM, Hermitage. Valeri Lebedev will discuss what data is most useful to transfer to BLAST.